

Notice of Allowability

Application No.

10/709,121

Examiner

Vickie Kim

Applicant(s)

ANDERSON ET AL.

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to examiner's amendment requested on 12/8/2006.
2. ☒ The allowed claim(s) is/are 1 and 3-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 9/16/04 & 5/13/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

VICKIE KIM
PRIMARY EXAMINER
Vickie Kim
Primary Examiner
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DETAILED ACTION

Election acknowledged

1. Applicants' election with traverse the invention group I of claims 1-14 and a reduction of oxygen content by vacuum method as an elected species is acknowledged. Applicants traverse the restriction requirement on the grounds that the invention of group I and II are not distinct because each invention are connected in at least one of design, operation or effect where instant inventions of group I and II are directed to techniques for limiting oxygen delivery to non-targeted tissue during illumination. However, this argument is not persuasive, as not all inventions would be classified together, or each invention may not be anticipated by other as evidenced by patents (see US6096030 and US20060004347) for the reasons set forth in previous office action. Furthermore, the search of the entire inventions in the non-patent (a significant part of a thorough examination) would be burdensome. As clearly stated in MPEP, restriction requirement is proper because each invention is patentably distinct and further burdensome.

Therefore, the restriction requirement is maintained, and made FINAL.

For the election of species, initial examination was performed with elected species (vacuum). Since elected species is found to be allowable, the examination was extended to next species (i.e. flushing with nitrogen gas). Therefore, the invention of group I, claims 1-14 are examined and the following decision was made based on examiner's amendment requested on 12/8/2006.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Shen, Charlton on 12/8/06.

2. The application has been amended as follows:

a. Cancel claims 2 and 15-22.

b. Rewrite the claim 1 as following:

----- 1.(currently amended) A method for inhibiting phototoxicity of the photosensitizing agent in non-targeted tissue during photodynamic therapy using a photosensitizing agent or a pre-photosensitizing agent, the method comprising the steps of: administering an agent to a targeted treatment site, the agent being effective to accumulate in tissue at the targeted treatment site as a photosensitizing agent; and irradiating the targeted treatment site to activate the photosensitizing agent to cause phototoxicity in tissue at the targeted treatment site while inhibiting phototoxicity of the photosensitizing agent in non-targeted tissue surrounding the targeted treatment site, wherein the step comprises reducing the oxygen-content in the non-targeted tissue during the step of irradiating the treatment site. -----

c. In claim 3, line 1, replace [claim 2] with --- claim 1 --- right before “,wherein”.

- d. In claim 4, line 1, replace [claim 2] with --- claim 1 --- right before “,wherein”.
- e. In claim 6, line 1, replace [claim 2] with --- claim 1 --- right before “,wherein”.

Reasons for Allowance

1. The following is an examiner's statement of reasons for allowance: Wyld et al teaches the influence of hypoxia and pH on aminolaevulinic acid-induced photodynamic therapy in cancer cells in vitro where ALA-induced PDT may be inhibited by hypoxia due to reduced intrinsic PpIX synthesis. However, it fails to teach that oxygen reduction in non-targeted tissue, especially utilization of vacuum suction or nitrogen gas flushing to reduce oxygen content from non-targeted tissue to protect the non-targeted tissue during photodynamic therapy. The claimed invention has not been taught by and considered to be novel over any prior art over the record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

- 1. All the pending claims 1 and 3-14 are allowed.

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2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickie Kim whose telephone number is 571-272-0579.

The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**VICKIE KIM
PRIMARY EXAMINER**

Vickie Kim
December 11, 2006
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